So why does Bristol have a Municipal Separate Storm Sewer System (MS4)?

The General Virginia Pollution Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Small Municipal Separate Storm Systems (aka MS4 permit) is required for a public entity to discharge stormwater to waters of the State. This permit coverage allows the City of Bristol to establish outfall locations or specific points to release stormwater into a stream. In the case of Bristol, stormwater is predominantly discharged to Beaver Creek and Little Creek. This means that any debris or pollutants that get collected by runoff via conveyances such as curb and gutters, pipe systems, and ditches will eventually show up in a stream. Limiting these pollutants to the maximum extent practicable (MEP) from entering streams and reducing the impacts on aquatic resources is the main purpose of the MS4.

How does the City of Bristol reduce pollutants in stormwater?

The MS4 permit requires the City to develop and implement a program plan every five years. The permit was originally issued in 2003 and has since been reissued in 2008, 2013, and 2018. Each program plan is required to address six minimum control measures (MCM):

1) Public Education and Outreach
2) Public Involvement and Participation
3) Illegal Discharge Detection and Elimination
4) Construction Site Stormwater Runoff Control
5) Post-Construction Stormwater Management
6) Pollution Prevention and Good Housekeeping For Municipal Operations
Each MCM has a Best Management Practice (BMP) or strategy associated with it. These strategies usually consist of implementing standard operating procedures (SOPs) or policies within the City. Annually these strategies are reviewed and evaluated to determine if the goal of each BMP is being maintained.

In addition to these MCMs, the MS4 permit requires action plans for addressing wasteload allocations (WLAs) assigned to the City as a result of Total Maximum Daily Loads (TMDLs) adopted by the State Water Control Board. The City has developed and implemented a TMDL action plan for Beaver Creek to address E. coli bacteria and sediment pollution.

Stormwater Facts!
1. Stormwater comes from precipitation.
2. Stormwater that does not soak into the ground becomes surface runoff.
3. Runoff becomes polluted as it runs along roads, parking lots, roofs, lawns and farms.
4. Runoff contains pollutants such as automotive fluids, fertilizers and pesticides, bacteria, sediments, litter, and pet waste.
5. Surface runoff flows into a storm sewer that eventually flows into waterways (rivers, streams, lakes, oceans).

https://www.bristolva.org/441/Stormwater-Management  
| 276-645-7386 | jpuckett@bristolva.org  

Next quarter the newsletter will focus on the water quality issue resulting from bacteria in pet waste reaching our streams.